

Application/Control Number 10/764,139
Art Unit: 3746

Listing of Claims:

Claims 1-12 (canceled)

Claim 13 (New) A double-acting reciprocating.....

Claim 14 (New) As in Claim 13 wherein the selection.....

Claim 15 (New) As in Claim 13 wherein said double-acting, high-pressure cryogenic
pump has.....

Claim 16 (New) A double-acting, reciprocating, high-pressure pump, as in Claim 13...

Claim 17 (New) A double-acting, reciprocating piston, high-pressure, cryogenic pump
comprising;.....

Claim 18 (New) As in Claim 17 wherein the selection of the numbers.....

Claim 19 (New) As in Claim 17 wherein said double-acting.....

Claim 20 (New) A double-acting, reciprocating piston, high-pressure pump as in
Claim 17.....

Claim 21 (New) Providing the major components for the cold end of a double-acting,...

Application/Control Number 10/764,139
Art Unit: 3746

Amendments to Claims:

Claim 13 (New)

This claim specifically includes a venting system for blow-by vapors.

In US 5,477,690 or US 5,411,374 A. GRAM, does not describe or discuss a blow-by venting system for vapors. Column 9, lines 26+ of US 5,477,690 does not describe a blow-by venting system.

Therefore, it is believed by this inventor that no blow-by venting system is included in the US Patents by A. GRAM. Thus, Claim 13 is significantly different from the US Patents by A. GRAM.

Claim 14 (New)

This claim is dependent on Claim 13, therefore same arguments apply.

Claim 15 (New)

This claim is dependent on Claim 13, hence same arguments apply.

Application/Control Number 10/764,139
Art Unit: 3746

Claim 16 (New)

This claim is dependent on Claim 13, hence same arguments apply.

Claim 17 (New)

This claim specifically includes a venting system for blow-by vapors.

In US 5,477,690 or US 5,411,374 A. GRAM does not describe or discuss a blow-by venting for vapors. Column 9, lines 26+ of US 5,477,690 does not describe a blow-by venting system. Therefore, it is believed by this inventor that no blow-by venting system is included in the US Patents 5,477,690 or 5,411,374 of A. GRAM. Thus, Claim 17 is significantly different from the US Patents of A. GRAM.

Claim 18 (New)

This claim is dependent on Claim 17, hence same arguments apply.

Claim 19 (New)

This claim is dependent on Claim 17, therefore same arguments apply.

Claim 20 (New)

This claim is dependent on Claim 17, hence same arguments apply.

Application/Control Number 10/764,139
Art Unit: 3746

Claim 21 (New)

This claim specifically includes a venting system for blow-by vapors.

Since A. GRAM does not describe or discuss a blow-by venting system in US Patents 5,477,690 or 5,411,374, Claim 21 of this application is significantly different from US Patents 5,477,690 or 5,411,374 by A. GRAM.

The spaced apart piston heads 4 and 6 of TORNARE, US Patent 4,639,197 perform pumping in series. Piston head 6 is a suction pressurizing stage for the single-acting, high-pressure stage, piston 4. There is no provision for venting blow-by vapors from the fluids from the single-acting, high-pressure stage, piston 4 in US Patent 4,639,197 by TORNARE. The double-acting, high-pressure pumps of applicant's invention operate in parallel, not in series.